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## Institutional Demand for Investment Classes – Is There a Supply Problem?

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# Overview

- Market Dimensions and the Supply of New Investments
- Non-traditional Assets
- Ownership of UK Equities
- Holdings of Pension Funds & Life Insurers and Current Trends
- Modelling the Effects of Changes in Demand
- Conclusions

# Market Dimensions – Global Marketplace

Asset Class	World	UK	US	Europe ex-UK	Japan	Asia ex-Japan	Other
	\$bn	\$bn	\$bn	\$bn	\$bn	\$bn	\$bn
Equities	31,330	2,426	14,266	6,217	2,953	3,571	1,896
Government bonds	19,266	470	4,898	5,713	5,808	832	1,546
Non-government bonds	29,425	1,650	15,409	7,989	2,144	813	1,421
Commercial property	4,734	361	1,598	1,262	600	825	88
Venture capital (est)	807	136	453	58	10	100	50
Alternative investments	1,167	120	654	323		35	35
Cash	7,354	447	3,950				
<b>Total</b>	<b>94,083</b>	<b>5,610</b>	<b>36,625</b>	<b>19,774</b>	<b>11,505</b>	<b>6,041</b>	<b>6,386</b>

Sources: World Federation of Exchanges, BIS, UBS Warburg, Swiss Re Sigma,  
NVCA, BVCA, EVCA, Asia Venture Capital Journal, AFSR/Correctnet

**Equities – UK represents 8% of global market**  
**Bonds – UK represents 4% of global market**

# Market Dimensions – Sterling Debt Issues

	End Sept 2003 \$bn
International issues	699.7
<i>Floating rate notes</i>	150.3
<i>Fixed interest bonds</i>	539.2
<i>Equity related bonds</i>	10.2
Domestic issues	1,167.8
<i>Government issues (gilts)</i>	466.3
<i>Financial companies</i>	362.9
<i>Non-financial companies</i>	338.6
<b>Total</b>	<b>1,867.5</b>

Source: BIS

**£79bn index-linked gilts at end 2003  
£9bn corporate index-linked bonds at end 2003**

# Market Dimensions – Derivative Exposures

	Dec 2001 \$bn	Dec 2002 \$bn	June/Sep 2003 \$bn
FX contracts	16,841	18,534	22,196
<i>OTC</i>	16,748	18,460	22,088
<i>Exchange traded</i>	93	74	108
Interest rate contracts	99,325	123,368	158,391
<i>OTC</i>	77,567	101,658	121,800
<i>Exchange traded</i>	21,758	21,710	36,591
Equity-linked contracts	3,790	4,334	5,629
<i>OTC</i>	1,881	2,308	2,799
<i>Exchange traded</i>	1,909	2,026	2,830
Commodity contracts	598	923	1,041
Other contracts	14,384	18,330	21,952
<b>Total</b>	<b>134,938</b>	<b>165,489</b>	<b>209,208</b>

Source: BIS

**Credit derivatives – \$3.5 trillion at end 2003  
and projected to reach c\$5 trillion at end 2004**

# Supply of New Equities and Bonds

New equity formation		World	UK	US	Europe ex-UK	Japan	Asia ex-Japan	Other
Year		\$bn	\$bn	\$bn	\$bn	\$bn	\$bn	\$bn
2002	New issues	107.0	8.1	31.7	28.4	n/a	26.5	12.4
	Existing issues	214.6	26.3	62.2	42.2	18.0	37.9	28.0
	<b>Total</b>	<b>321.7</b>	<b>34.4</b>	<b>93.9</b>	<b>70.6</b>	<b>18.0</b>	<b>64.4</b>	<b>40.4</b>
2003	New issues	114.1	7.6	33.7	28.1	n/a	27.2	17.4
	Existing issues	247.9	22.6	57.8	62.3	33.9	51.2	20.1
	<b>Total</b>	<b>362.0</b>	<b>30.2</b>	<b>91.5</b>	<b>90.4</b>	<b>33.9</b>	<b>78.4</b>	<b>37.5</b>

Gross bond formation		World	UK	US	Europe ex-UK	Japan	Asia ex-Japan	Other
Year		\$bn	\$bn	\$bn	\$bn	\$bn	\$bn	\$bn
2001		5,002	263	2,492	1,478	n/a	244	525
2002		5,264	279	2,726	1,824	n/a	265	169
2003		8,550	446	3,000 *	4,623	n/a	312	169

Source: BIS, \* Estimate

**Equity formation 1-1.5% pa of World and UK market cap in 2002 and 2003, net bond issuance significantly higher**

# UK Gilt Issuance

Years ending 31 March	Central Government Net Cash Requirement £bn
1999	(4.6)
2000	(9.1)
2001	(35.3)
2002	2.8
2003	21.6
2004	42.3
2005	35
2006	33
2007	31
2008	27
2009	23

Source: DMO

**Gross outstanding UK government debt = 38% of GDP (May 2004)  
National debt has ranged between 36 and 44% of GDP in past 5 years**

## Gross planned issuance in 2004/05

- £15.0bn short conventional gilts
- £10.5bn medium conventional gilts
- £14.5bn long conventional gilts
- £8.0bn index-linked gilts
- **£48.0bn total**

# Non-traditional Assets

- Inflation-linked bonds
- Inflation swaps
- Asset backed securities, mortgages and CDOs
- Credit default swaps
- Emerging market and high yield debt
- Property
- Private equity
- Hedge funds

# Ownership of UK Equities

31 Dec £bn	Individuals	Charities	Insurers	Pension funds	Investment trusts	Unit trusts	Banks	Other financials	Non-financial companies	Central government	Public sector	Rest of world	Total
1989	104	12	94	155	8	30	3	6	19	10	10	65	516
1990	91	8	91	140	7	27	3	3	13	9	9	53	454
1991	105	13	110	166	8	30	1	4	18	7	7	68	537
1992	125	11	120	200	13	38	3	3	11	11	11	81	627
1993	141	13	160	252	20	53	5	5	12	10	10	130	809
1994	155	10	167	212	15	52	3	10	9	6	6	124	768
1995									No data collated				
1996									No data collated				
1997	209	24	299	280	24	85	1	26	15	1	1	304	1,269
1998	251	20	326	326	29	46	8	61	21	1	1	415	1,505
1999	276	24	390	354	35	48	18	91	40	2	2	530	1,809
2000	290	25	381	321	39	31	26	83	27	1	1	587	1,811
2001	230	16	311	250	35	28	20	153	15	1	1	496	1,555
2002	166	13	230	180	21	19	24	121	9	1	1	370	1,155

Source: ONS

**Between 1990 and 2002, overseas holdings rose from 12% to 32%, personal holdings fell from 20% to 14% and institutional holdings fell from 58% to 39%**

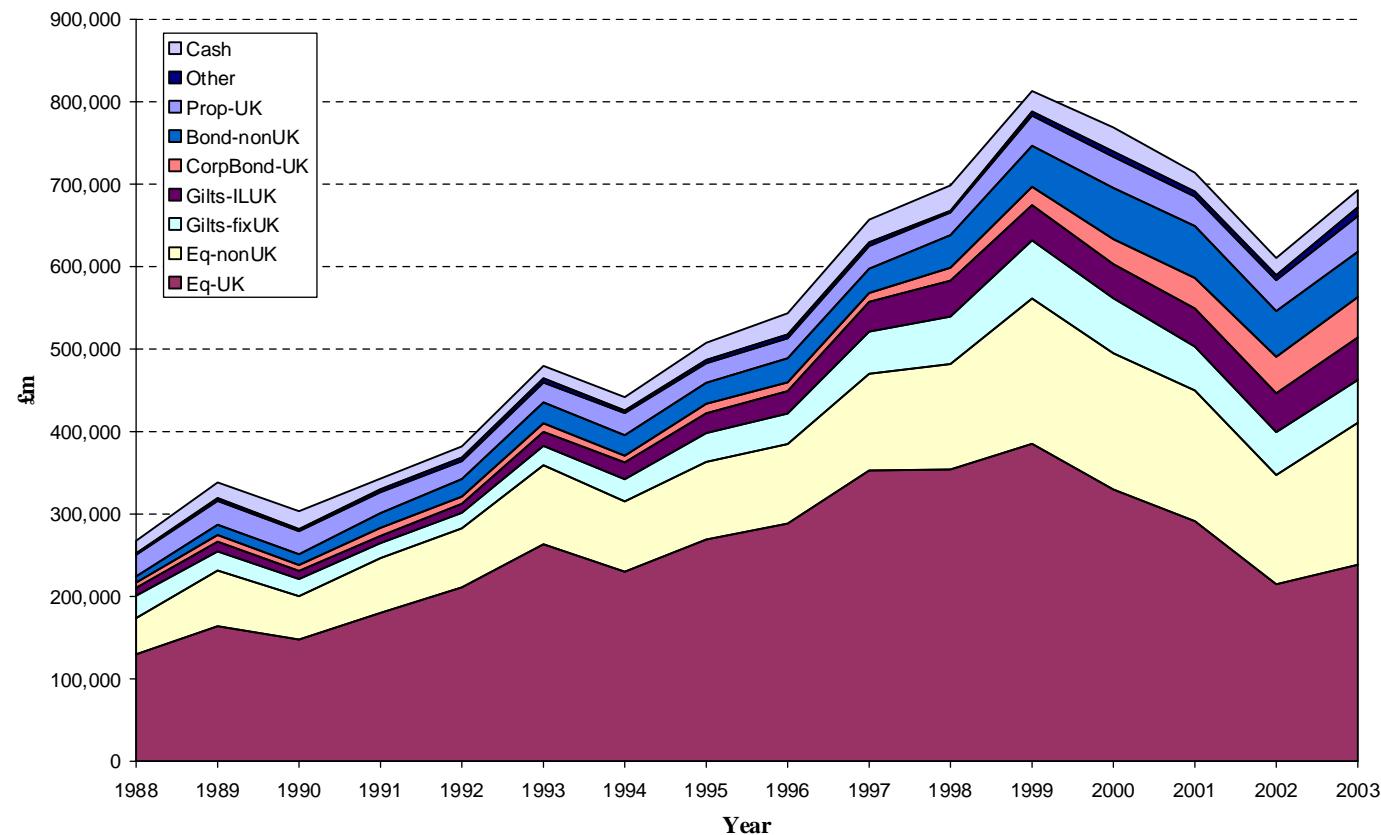
# Institutional Holdings of UK Equities

At 31 December	Unit Trusts £bn	Investment Trusts £bn	Pension Funds £bn	General Insurers £bn	Life Insurers £bn	Total £bn
1990	25.5	9.9	147.7	7.9	81.0	272.0
1991	29.5	10.6	180.1	7.4	101.9	329.5
1992	33.4	12.8	211.0	7.4	122.1	386.6
1993	49.7	14.9	263.2	10.3	166.5	504.6
1994	43.3	15.9	229.8	10.1	159.4	458.7
1995	59.1	19.4	269.1	12.8	199.2	559.6
1996	67.5	25.0	288.4	13.4	223.2	617.6
1997	85.7	27.9	352.7	15.0	283.2	764.6
1998	93.3	24.6	354.0	13.2	305.0	790.1
1999	119.5	28.0	385.2	13.1	369.9	915.6
2000	116.8	33.5	329.6	11.1	358.3	849.3
2001	103.7	30.3	291.3	10.1	312.1	747.6
2002	82.9	19.5	214.6	6.8	230.8	554.4
2003	n/a	25.1	238.5	8.6	267.3	n/a

Source: ONS

**Between 1990 and 2002, life insurers holdings rose from 18% to 20%, and pension fund holdings fell from 30% to 16% of UK equity markets**

# UK Pension Fund Holdings



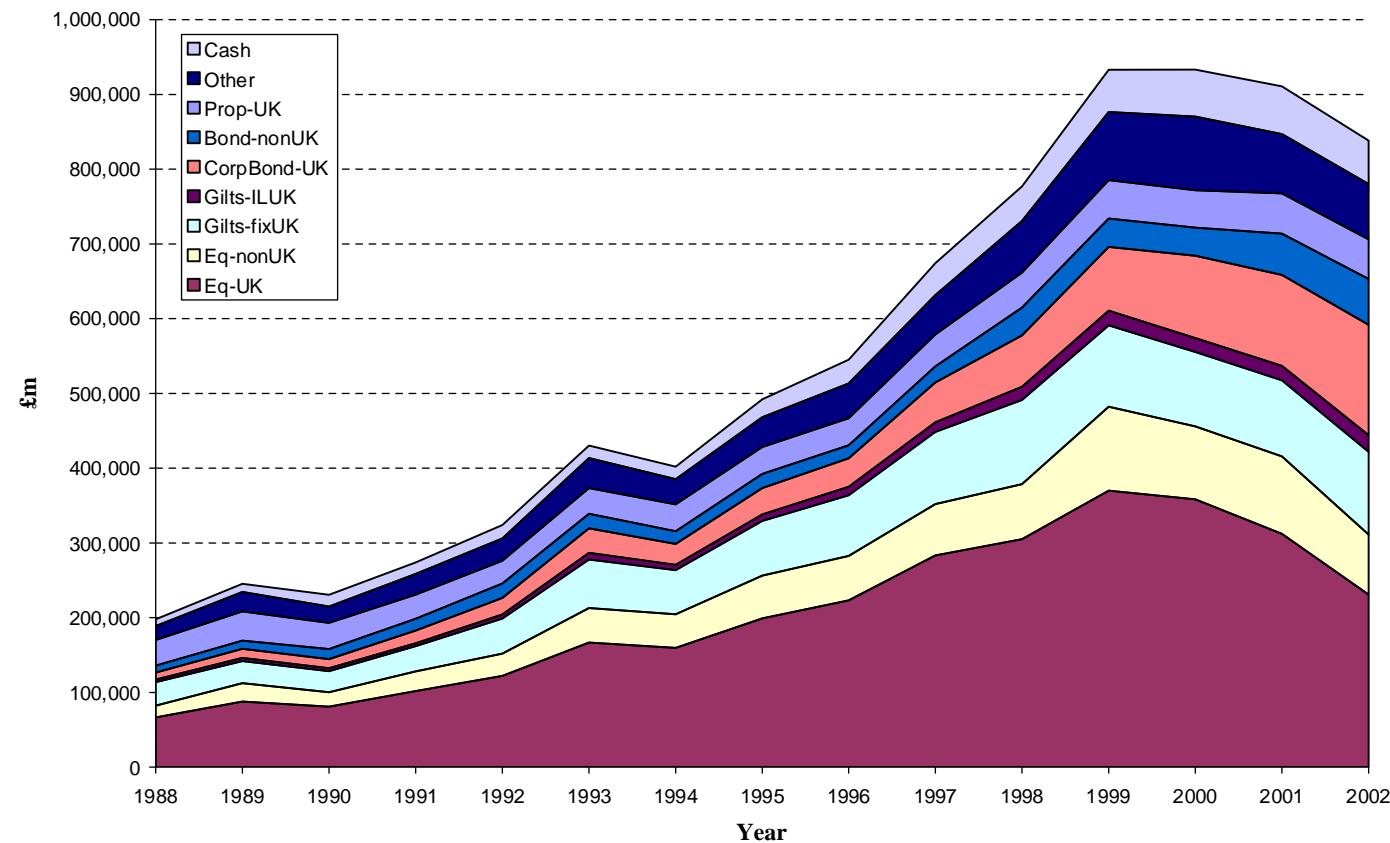
Source: ONS

# UK Pension Fund Asset Allocations

At 31 December	Total assets £bn	UK equities %	Total equities %	UK gilts %	UK corp bonds %	UK IL gilts %	Total bonds %	Other %
1993	479.5	54.9	74.9	4.9	2.2	3.5	15.9	9.2
...								
1997	656.9	53.7	71.6	7.8	1.6	5.5	19.4	9.0
1998	698.7	50.7	69.0	8.2	2.2	6.3	22.4	8.7
1999	813.1	47.4	69.0	8.7	2.7	5.3	22.8	8.2
2000	768.9	42.9	64.4	8.7	4.0	5.4	26.1	9.6
2001	713.9	40.8	63.0	7.5	5.2	6.5	27.9	9.0
2002	610.4	35.2	56.9	8.5	7.2	7.7	32.6	10.5
2003	692.8	34.4	59.2	7.5	7.1	7.4	30.0	10.8

Source: ONS

# UK Life Insurance Holdings



Source: ONS

# UK Life Insurance Asset Allocations

At 31 Dec	Total assets £bn	UK equity %	Non-UK equity %	UK fixed gilts %	UK IL gilts %	UK corp bonds %	Non-UK bonds %	Property %	Cash/other %
<b>Total funds</b>									
1999	886.3	47.4	14.2	11.9	2.3	9.0	2.5	6.1	6.5
2000	924.3	44.7	14.1	11.4	2.6	10.8	2.6	6.5	7.3
2001	861.0	39.3	13.2	12.3	2.6	12.4	3.6	7.2	9.4
2002	804.1	33.4	11.4	14.0	3.2	14.4	6.3	8.2	9.1
<b>Linked funds</b>									
1999	335.3	53.1	19.3	7.8	3.8	2.4	1.6	2.1	9.8
2000	363.8	50.7	21.4	8.1	4.7	2.8	2.0	2.2	8.1
2001	341.2	48.6	21.3	8.1	5.2	4.1	2.0	2.5	8.1
2002	318.8	45.9	19.9	9.2	6.2	4.9	2.0	3.2	8.8
<b>Non-linked funds</b>									
1999	551.0	43.7	11.4	14.4	1.4	13.0	2.9	8.6	4.5
2000	560.6	40.4	9.8	13.6	1.2	15.9	3.0	9.3	6.7
2001	519.9	32.9	8.1	15.1	0.9	17.7	4.6	10.3	10.3
2002	485.4	24.9	6.1	17.2	1.2	20.6	9.1	11.5	9.4

Source: ABI

# Current trends – Pension funds

- Increased emphasis on discontinuance cover
- Many funds are overweight in equities
- Bonds are “expensive” at present, particularly index-linked
- Increasing maturity of funds
- Improving life expectancy
- New regulations – Scheme Specific Funding

# Current trends – Life insurers

- Equity market falls between 2001-2003 reduced solvency of most with-profit funds
- New “twin peaks” regulatory regime for with-profit
- With-profit is running down
- Bulk of new business is unit linked, particularly for pension savings
- Competition from ISAs – approved life insurance is less tax inefficient
- DC pensions are key to future success of insurance sector

# Modelling – The Current Position

	Assets		Asset allocation		
	Pension funds £bn	Life funds £bn	Pension funds	Non-linked life funds	Linked life funds
UK equity	238.5	230.8	34.4%	24.9%	45.9%
Non-UK equity	172.0	80.2	24.8%	6.1%	19.9%
UK fix int gilts	52.0	110.7	7.5%	17.2%	9.2%
UK IL gilts	51.6	22.4	7.4%	1.2%	6.2%
UK corp bonds	48.9	147.5	7.1%	20.6%	4.9%
Non-UK bonds	55.1	61.3	8.0%	9.1%	2.0%
Property	43.2	53.0	6.2%	11.5%	3.2%
Cash	20.6	58.1	3.0%	3.0%	3.0%
Private equity/other	10.8	74.3	1.6%	6.4%	5.8%
Total	692.8	838.2	100.0%	100.0%	100.0%
Total assets (£bn)		692.8	503.0	335.2	

Note: Pension assets Dec 2003, Insurance assets Dec 2002 (ONS). Insurance allocations Dec 2002 (ABI)

# Modelling – Scenarios

Growth rates	Best estimate	Alternative A	Alternative B
GDP growth	4% pa	4% pa	4% pa
Pension fund growth 2003-09	1% pa	2% pa	-1% pa
Non-linked life fund growth 2002-09	-8% pa	1% pa	-15% pa
Linked life fund growth 2002-09	6% pa	3% pa	10% pa

Note: Growth rates are relative to GDP.

Asset changes	Scenario 1 – Large change			Scenario 2 – Moderate change		
	Pension funds	Non-linked life funds	Linked life funds	Pension funds	Non-linked life funds	Linked life funds
UK equity	16.0%	10.0%	46.0%	24.0%	10.0%	46.0%
Non-UK equity	22.0%	4.0%	20.0%	24.0%	4.0%	20.0%
UK fix int gilts	11.75%	22.0%	9.0%	9.75%	22.0%	9.0%
UK IL gilts	11.75%	4.0%	6.0%	9.75%	4.0%	6.0%
UK corp bonds	11.75%	28.0%	5.0%	9.75%	28.0%	5.0%
Non-UK bonds	11.75%	12.0%	2.0%	9.75%	12.0%	2.0%
Property	10.0%	12.0%	3.0%	8.0%	12.0%	3.0%
Cash	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%
Private equity/other	2.0%	5.0%	6.0%	2.0%	5.0%	6.0%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

# Modelling – Results (1)

Institutional cashflows during 2004-2009  £bn	Scenario 1 – Large change				Scenario 2 – Moderate change				Total
	Pension funds	Non-linked life funds	Linked life funds	Total	Pension funds	Non-linked life funds	Linked life funds	Total	
UK equity	-143	-122	110	-155	-69	-122	110	-80	
Non-UK equity	-6	-24	48	18	13	-24	48	37	
UK fix int gilts	49	-21	23	51	31	-21	23	32	
UK IL gilts	50	8	15	72	31	8	15	54	
UK corp bonds	53	-20	14	47	34	-20	14	28	
Non-UK bonds	46	-10	6	41	27	-10	6	22	
Property	40	-29	6	17	21	-29	6	-1	
Cash	4	-7	8	6	4	-7	8	6	
Private equity/other	5	-22	15	-2	5	-22	15	-2	
Total	97	-247	246	96	97	-247	246	96	

# Modelling – Results (2)

Institutional growth scenario  Asset allocation change during 2004-2009	Best estimate		Alternative A		Alternative B	
	Large	Moderate	Large	Moderate	Large	Moderate
	Scenario 1 £bn	Scenario 2 £bn	Scenario 3 £bn	Scenario 4 £bn	Scenario 5 £bn	Scenario 6 £bn
UK equity	-155	-80	-167	-88	-97	-31
Non-UK equity	18	37	20	40	28	44
UK fix int gilts	51	32	122	102	22	5
UK IL gilts	72	54	85	66	66	49
UK corp bonds	47	28	143	123	0	-16
Non-UK bonds	41	22	86	66	14	-3
Property	17	-1	60	41	-6	-23
Cash	6	6	14	14	4	4
Private equity/other	-2	-2	9	9	0	0
Total	96	96	372	372	30	30

# Conclusions (1)

- Only the most extreme scenarios are likely to result in price adjustments for UK assets ...
- ... except over short transitional periods
- Pension funds likely to sell UK equities – primarily to life insurance linked funds, and overseas investors
- Index-linked bonds will still be expensive for next few years, but supply is expected to grow significantly

## Conclusions (2)

- Pension funds likely to increase usage of inflation and credit default swaps significantly
- Private equity and hedge funds will become part of the mainstream
- Equity mandates likely to permit short selling, modest leverage, larger universe of permitted assets in future
- Credit management will become more important with the increased use of derivatives and asset backed securities